

ABSTRACT OF THE DISCLOSURE

A semiconductor device with a resistor element whose the resistance value can be adjusted to a desired value without changing dimensions thereof is provided. The resistor element is formed of a poly-Si layer formed on an insulator over a semiconductor substrate. An impurity is introduced into the poly-Si layer by the use of ion implantation. In the vicinity of both ends of the poly-Si layer forming the resistor element, silicide layers each made of cobalt silicide or the like are formed over an upper surface of the poly-Si layer. The area of one silicide layer is larger than that of the other silicide layer. By adjusting the area of the one silicide layer, the length between the silicide layers is adjusted and the resistance value of the resistor element can be adjusted without changing the shape of the poly-Si layer.